

## Claims

We claim:

- 5     1.     A front-end circuitry in a radio-frequency (RF) apparatus, comprising:  
a filter circuitry with a differential output, having an output impedance, the filter circuitry  
configured to filter signals outside a signal band of interest; and  
an impedance matching network, with a differential input coupled to the output of the  
filter circuitry, the impedance matching network further having a differential  
output coupled to a signal processing circuitry having an input impedance,  
wherein the impedance matching network matches the input impedance of the signal  
processing circuitry to the output impedance of the filter circuitry.
- 10     2.     A radio-frequency (RF) apparatus, comprising:  
a first circuit partition, comprising receiver analog circuitry configured to produce a  
digital receive signal from an analog radio-frequency signal; and  
a second circuit partition, comprising receiver digital circuitry configured to accept the  
digital receive signal, wherein the first and second circuit partitions are partitioned  
so that interference effects between the first circuit partition and the second circuit  
partition tend to be reduced.
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